



WASHINGTON ALLOY'S
Quality Management System is
Certified to **ISO 9001:2008**
Cert # 05-R0925

111T1-K3 FLUX CORED Welding Wire

U.S. ALLOY CO.
dba Washington Alloy
7010-G Reames Rd.
Charlotte, NC 28216
www.weldingwire.com



American Welding Society
Sustaining Company Member



ALLOY DESCRIPTION AND APPLICATION:

111T1-K3 is a flux cored wire designed for all position single or multi pass using CO₂ or Argon /CO₂ shielding gas welding having a smooth spray-type transfer commonly used on low alloy & high strength steels. This all position wire normally used in high strength applications which will produce a chemical composition of 2 % nickel, 0.5 % molybdenum and 2.0 % manganese yielding strengths ranging from 110-130 ksi. Steels commonly welded with this grade would include T-1, HY-80, HSLA-80, HY-100, HSLA-100, ASTM A710, ASTM A514 and similar grades.

TYPICAL FCAW WELDING PROCEDURES; DCEP with 100% CO₂ (35-45cfh)

Wire Diameter	Wire Speed (ipm)	Amps	Volts	Electrical Stickout
0.045"	385	260	28	1/2-1"
1/16"	340	315	30	1/2-1"

Procedures may vary with change in position, base metals, filler metals, equipment and other changes. **(Based on FLAT)** for mixed gas lower the voltage by 2-5 %

UNDILUTED WELD METAL (%) AND WELD METAL PROPERTIES;

	AWS Spec.		AWS Spec
Carbon	0.15 max.	Phosphorus	0.030 max.
Manganese	0.75-2.25	Sulfur	0.030 max.
Nickel	1.25-2.60		
Chromium	0.15 max	Tensile Strength (psi)	110-130,000
Silicon	0.80 max	Yield Strength (psi)	98,000 min.
Molybdenum	0.25-0.65	Elongation in 2"	15% min.
Vanadium	0.05 max.	Charpy V-notch (0°F)	20 ft·lbs min

AVAILABLE SIZES: TCF 111T1-K3= Spools of .045,

Other sizes may be available – please inquire

SPECIFICATIONS; ANSI/AWS A5.29 E111T1-K3C , E111T1-K3M

ASME SFA A5.29 E111T1-K3C , E111T1-K3M

Classifications ending in "C" are classified with CO₂ and "M" with 75-80% argon/balance CO₂

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